RESULT 2
US-09-981-353-54
; Sequence 54, Application US/09981353
; Patent No. US20020160382A1
; GENERAL INFORMATION:
; APPLICANT: Lasek, Amy W.
; APPLICANT: Jones, David A.
; TITLE OF INVENTION: GENES EXPRESSED IN COLON CANCER
; FILE REFERENCE: PA-0038 US
; CURRENT APPLICATION NUMBER: US/09/981,353
; CURRENT FILING DATE: 2001-10-11
; NUMBER OF SEQ ID NOS: 194
; SOFTWARE: PERL Program
; SEQ ID NO 54
;   LENGTH: 917
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: Incyte ID No. US20020160382A1 2771481CD1
US-09-981-353-54

  Query Match   99.9%; Score 4771; DB 10; Length 917;
  Best Local Similarity   99.9%; Pred. No. 0;
  Matches 916; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

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Qy          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60

Qy         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120

Qy        121 FTECGEKGEYIHFTPDLLLEKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180
              |||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db        121 FTECGEKGEYIHFTPDLLLGKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180

Qy        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240

Qy        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300

Qy        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360

Qy        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420
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Db        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420

Qy        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480
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Qy        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540

Qy        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600
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Db        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600

Qy        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660

Qy        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720
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Db        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720

Qy        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780
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Db        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780

Qy        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840

Qy        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPDKSHNSGVNISTLVL 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPDKSHNSGVNISTLVL 900

Qy        901 SVIGSVVIVNFILSTTI 917
              |||||||||||||||||
Db        901 SVIGSVVIVNFILSTTI 917
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RESULT 4
AAU88029
ID AAU88029 standard; Protein; 917 AA.

Fig 14

XX
AC AAU88029;
XX
DT 05-JUN-2002 (first entry)
XX
DE Human calcium-activated chloride channel hCLCA4.
XX
KW Nucleic acid library; immune response; asthma; COPD;
KW airway hyperresponsiveness; bronchoalveolar manifestation;
KW signature sequence; SS; chronic obstructive pulmonary disease;
KW allergic disease; rhinitis; atopic dermatitis; urticaria;
KW autoimmune disease; multiple sclerosis; inflammatory bowel disease;
KW allograft rejection; infectious disease.
KW calcium-activated chloride channel.
XX
OS Homo sapiens.
XX
PN WO200214366-A2.
XX
PD 21-FEB-2002.
XX
PF 16-AUG-2001; 2001WO-NL00610.
XX
PR 16-AUG-2000; 2000EP-0202867.
XX
PA (UYUT-) RIJKSUNIV UTRECHT.
XX
PI Groot PC, Van Bergenhenegouwen BJ, Van Oosterhout AJM;
XX
DR WPI; 2002-241888/29.
XX
PT Nucleic acid library comprising genes which are capable of initiation,
PT progression and suppression of an immune response, especially an immune
PT response observed with airway hyper-responsiveness of asthma -
XX
PS Disclosure; Fig 14; 120pp; English.
XX
CC The invention relates to a nucleic acid library comprising genes or
CC their fragments which are capable of modulating an immune response
CC observed with airway hyperresponsiveness and/or bronchoalveolar
CC manifestations of asthma. Also included are a method for modulating an
CC immune response of an individual comprising modulating a gene comprising
CC a nucleic acid at least functionally equivalent to a nucleic acid
CC identifiable by a signature sequence (SS) given in the specification such
CC as R1-SO-R1-A11, StO1-A10, SvO2-1-C11, StO1-A12, and R1-SO-R1-B7, a
CC substance (for use as a medicament) capable of modulating a gene
CC comprising a nucleic acid at least functionally equivalent to a nucleic
CC acid identifiable by SS and the use of a proteinaceous substance derived
CC from a nucleic acid at least functionally equivalent to a nucleic acid
CC identifiable by SS for the production of an antagonist (for use as a
CC medicament) against the substance. The antagonist and substance are
CC useful for the treatment of an immune response observed with airway
CC hyperresponsiveness and/or bronchoalveolar manifestations of asthma.
CC The method is useful for modulating the above immune response, where the

CC gene encodes a gene product capable of modulating the immune response.
CC The substance is useful for treating an immune response, particularly
CC asthma, chronic obstructive pulmonary disease (COPD), allergic diseases
CC (rhinitis, atopic dermatitis, urticaria), autoimmune diseases (e.g.
CC multiple sclerosis), inflammatory bowel disease, allograft rejection and
CC infectious disease. The present sequence is a mouse or human
CC protein encoded by a signature sequence gene or its homologue/functional
CC equivalent.
XX
SQ Sequence 917 AA;

Query Match 99.7%; Score 4766; DB 23; Length 917;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 915; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60

Qy         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120

Qy        121 FTECGEKGEYIHFTPDLLLEKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180
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Db        121 FTECGEKGEYIHFTPDLLLGKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180

Qy        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240

Qy        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300

Qy        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360
              || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 KIRQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360

Qy        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420

Qy        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480

Qy        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540

Qy        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600

Qy        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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```
Db        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660

Qy        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720

Qy        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780

Qy        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840

Qy        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPDKSHNSGVNISTLVL 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPDKSHNSGVNISTLVL 900

Qy        901 SVIGSVVIVNFILSTTI 917
              |||||||||||||||||
Db        901 SVIGSVVIVNFILSTTI 917
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RESULT 5
ABP98501
ID   ABP98501 standard; protein; 917 AA.
XX
AC   ABP98501;
XX
DT   20-MAY-2003 (first entry)
XX
DE   Amino acid sequence of disease-associated CLCA4 protein.
XX
KW   Antiinflammatory; Antiasthmatic; Respiratory; Opthalmological;
KW   Antiallergic; Gastrointestinal; Chest disease;
KW   Respiratory disease; Bowel disease; Allergic conjunctivitis;
KW   CLCA4; Human.
XX
OS   Homo sapiens.
XX
PN   WO2003005024-A1.
XX
PD   16-JAN-2003.
XX
PF   03-JUL-2002; 2002WO-JP06730.
XX
PR   04-JUL-2001; 2001JP-0203036.
XX
PA   (TAKE) TAKEDA CHEM IND LTD.
XX
PI   Nakanishi A, Morita S;
XX
DR   WPI; 2003-210385/20.
XX
PT   Disease-associated gene CLCA4, its product and antibody, applicable in
PT   diagnosis and screening drugs for pulmonary and chest diseases
PT   accompanied by inflammation in lung or airway, and respiratory diseases
PT   -
XX
PS   Claim 1; Page 63-67; 84pp; Japanese.
XX
CC   This invention relates to CLCA4, which is applicable in diagnosis
CC   and screening of drugs for certain diseases and is thought to be
CC   antiinflammatory, antiasthmatic; opthalmological and antiallergic
CC   in its action.The CLCA4 gene and its product are applicable in
CC   diagnosis and screening drugs for pulmonary and chest diseases
CC   accompanied by inflammation in lung or airway, respiratory diseases
CC   inflammatory bowel diseases and allergic conjunctivitis. The
CC   present sequence is the CLCA4 protein. The nucleotide sequence is
CC   given in file ABZ59766.
XX
SQ   Sequence   917 AA;

  Query Match   99.7%; Score 4766; DB 24; Length 917;
  Best Local Similarity   99.8%; Pred. No. 0;
  Matches 915; Conservative   0; Mismatches   2; Indels   0; Gaps   0;

Qy   1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60

```
Qy          61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120

Qy         121 FTECGEKGEYIHFTPDLLLEKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180
               |||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db         121 FTECGEKGEYIHFTPDLLLGKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180

Qy         181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240

Qy         241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300

Qy         301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360
               || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         301 KIRQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360

Qy         361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420

Qy         421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480

Qy         481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540

Qy         541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600

Qy         601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660

Qy         661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720

Qy         721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780

Qy         781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840

Qy         841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPDKSHNSGVNISTLVL 900
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPDKSHNSGVNISTLVL 900
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Qy        901 SVIGSVVIVNFILSTTI 917
              |||||||||||||||||
Db        901 SVIGSVVIVNFILSTTI 917
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RESULT 6
AAY66749
ID AAY66749 standard; protein; 919 AA.
XX
AC AAY66749;
XX
DT 05-APR-2000 (first entry)
XX
DE Membrane-bound protein PRO1124
XX
KW Membrane-bound polypeptide; PRO polypeptide; LDL receptor; TIE ligand;
KW pharmaceutical; receptor immunoadhesin; gene mapping.
XX
OS Homo sapiens.
XX
PN WO9963088-A2.
XX
PD 09-DEC-1999.
XX
PF 02-JUN-1999; 99WO-US12252.
XX
PR 02-JUN-1998; 98US-0087607.
PR 02-JUN-1998; 98US-0087609.
PR 02-JUN-1998; 98US-0087759.
PR 03-JUN-1998; 98US-0087827.
PR 04-JUN-1998; 98US-0088021.
PR 04-JUN-1998; 98US-0088025.
PR 04-JUN-1998; 98US-0088028.
PR 04-JUN-1998; 98US-0088029.
PR 04-JUN-1998; 98US-0088030.
PR 04-JUN-1998; 98US-0088033.
PR 04-JUN-1998; 98US-0088326.
PR 05-JUN-1998; 98US-0088167.
PR 05-JUN-1998; 98US-0088202.
PR 05-JUN-1998; 98US-0088212.
PR 05-JUN-1998; 98US-0088217.
PR 09-JUN-1998; 98US-0088655.
PR 10-JUN-1998; 98US-0088722.
PR 10-JUN-1998; 98US-0088730.
PR 10-JUN-1998; 98US-0088734.
PR 10-JUN-1998; 98US-0088738.
PR 10-JUN-1998; 98US-0088740.
PR 10-JUN-1998; 98US-0088741.
PR 10-JUN-1998; 98US-0088742.
PR 10-JUN-1998; 98US-0088810.
PR 10-JUN-1998; 98US-0088811.
PR 10-JUN-1998; 98US-0088824.
PR 10-JUN-1998; 98US-0088825.
PR 10-JUN-1998; 98US-0088826.
PR 11-JUN-1998; 98US-0088858.
PR 11-JUN-1998; 98US-0088861.
PR 11-JUN-1998; 98US-0088863.
PR 11-JUN-1998; 98US-0088876.
PR 12-JUN-1998; 98US-0089090.
PR 12-JUN-1998; 98US-0089105.
PR 16-JUN-1998; 98US-0089440.
PR 16-JUN-1998; 98US-0089512.

Seq. 258
Fig 258

PR 16-JUN-1998; 98US-0089514.
PR 17-JUN-1998; 98US-0089532.
PR 17-JUN-1998; 98US-0089538.
PR 17-JUN-1998; 98US-0089598.
PR 17-JUN-1998; 98US-0089599.
PR 17-JUN-1998; 98US-0089600.
PR 17-JUN-1998; 98US-0089653.
PR 18-JUN-1998; 98US-0089801.
PR 18-JUN-1998; 98US-0089907.
PR 18-JUN-1998; 98US-0089908.
PR 19-JUN-1998; 98US-0089947.
PR 19-JUN-1998; 98US-0089948.
PR 19-JUN-1998; 98US-0089952.
PR 22-JUN-1998; 98US-0090246.
PR 22-JUN-1998; 98US-0090252.
PR 22-JUN-1998; 98US-0090254.
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PR 23-JUN-1998; 98US-0090355.
PR 24-JUN-1998; 98US-0090429.
PR 24-JUN-1998; 98US-0090431.
PR 24-JUN-1998; 98US-0090435.
PR 24-JUN-1998; 98US-0090444.
PR 24-JUN-1998; 98US-0090445.
PR 24-JUN-1998; 98US-0090461.
PR 24-JUN-1998; 98US-0090472.
PR 24-JUN-1998; 98US-0090535.
PR 24-JUN-1998; 98US-0090538.
PR 24-JUN-1998; 98US-0090540.
PR 24-JUN-1998; 98US-0090557.
PR 25-JUN-1998; 98US-0090676.
PR 25-JUN-1998; 98US-0090678.
PR 25-JUN-1998; 98US-0090688.
PR 25-JUN-1998; 98US-0090690.
PR 25-JUN-1998; 98US-0090691.
PR 25-JUN-1998; 98US-0090694.
PR 25-JUN-1998; 98US-0090695.
PR 25-JUN-1998; 98US-0090696.
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PR 26-JUN-1998; 98US-0090863.
PR 01-JUL-1998; 98US-0091358.
PR 01-JUL-1998; 98US-0091360.
PR 01-JUL-1998; 98US-0091544.
PR 02-JUL-1998; 98US-0091478.
PR 02-JUL-1998; 98US-0091486.
PR 02-JUL-1998; 98US-0091519.
PR 02-JUL-1998; 98US-0091626.
PR 02-JUL-1998; 98US-0091628.
PR 02-JUL-1998; 98US-0091633.
PR 02-JUL-1998; 98US-0091646.
PR 02-JUL-1998; 98US-0091673.
PR 07-JUL-1998; 98US-0091978.
PR 07-JUL-1998; 98US-0091982.
PR 09-JUL-1998; 98US-0092182.
PR 10-JUL-1998; 98US-0092472.
PR 20-JUL-1998; 98US-0093339.
PR 30-JUL-1998; 98US-0094651.
PR 04-AUG-1998; 98US-0095282.

PR 04-AUG-1998; 98US-0095285.
PR 04-AUG-1998; 98US-0095301.
PR 04-AUG-1998; 98US-0095302.
PR 04-AUG-1998; 98US-0095318.
PR 04-AUG-1998; 98US-0095321.
PR 04-AUG-1998; 98US-0095325.
PR 10-AUG-1998; 98US-0095916.
PR 10-AUG-1998; 98US-0095929.
PR 10-AUG-1998; 98US-0096012.
PR 11-AUG-1998; 98US-0096143.
PR 11-AUG-1998; 98US-0096146.
PR 12-AUG-1998; 98US-0096329.
PR 17-AUG-1998; 98US-0096757.
PR 17-AUG-1998; 98US-0096766.
PR 17-AUG-1998; 98US-0096768.
PR 17-AUG-1998; 98US-0096773.
PR 17-AUG-1998; 98US-0096791.
PR 17-AUG-1998; 98US-0096867.
PR 17-AUG-1998; 98US-0096891.
PR 17-AUG-1998; 98US-0096894.
PR 17-AUG-1998; 98US-0096895.
PR 17-AUG-1998; 98US-0096897.
PR 18-AUG-1998; 98US-0096949.
PR 18-AUG-1998; 98US-0096950.
PR 18-AUG-1998; 98US-0096959.
PR 18-AUG-1998; 98US-0096960.
PR 18-AUG-1998; 98US-0097022.
PR 19-AUG-1998; 98US-0097141.
PR 20-AUG-1998; 98US-0097218.
PR 24-AUG-1998; 98US-0097661.
PR 26-AUG-1998; 98US-0097951.
PR 26-AUG-1998; 98US-0097952.
PR 26-AUG-1998; 98US-0097954.
PR 26-AUG-1998; 98US-0097955.
PR 26-AUG-1998; 98US-0097971.
PR 26-AUG-1998; 98US-0097974.
PR 26-AUG-1998; 98US-0097978.
PR 26-AUG-1998; 98US-0097979.
PR 26-AUG-1998; 98US-0097986.
PR 26-AUG-1998; 98US-0098014.
PR 31-AUG-1998; 98US-0098525.
PR 16-SEP-1998; 98US-0100634.
PR 12-JAN-1999; 99US-0115565.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker K, Chen J, Goddard A, Gurney AL, Smith V, Watanabe CK;
PI Wood WI, Yuan J;
XX
DR WPI; 2000-072883/06.
DR N-PSDB; AAZ65095.
XX
PT Membrane-bound proteins and related nucleotide sequences -
XX
PS claim 12; Fig 274; 822pp; English.
XX
CC The invention provides membrane-bound PRO polypeptides and

CC polynucleotides encoding them. The PRO sequences of the invention were
CC identified based on extracellular domain homology screening. The PRO
CC sequences have homology with proteins including LDL receptors, TIE
CC ligands and various enzymes. The membrane-bound proteins and receptor
CC molecules are useful as pharmaceutical and diagnostic agents. Receptor
CC immunoadhesins, for instance, can be used as therapeutic agents to block
CC receptor-ligand interactions. The membrane-bound proteins can also be
CC employed for screening of potential peptide or small molecule inhibitors
CC of the relevant receptor/ligand interaction. The PRO encoding sequences
CC are useful as hybridization probes, in chromosome and gene mapping and in
CC the generation of antisense RNA and DNA. PRO nucleic acid sequences
CC will also be useful for the preparation of PRO polypeptides, especially
CC by recombinant techniques.
XX
SQ Sequence 919 AA;

Query Match 99.6%; Score 4760; DB 21; Length 919;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 916; Conservative 0; Mismatches 1; Indels 2; Gaps 1;

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Qy          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60

Qy         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120

Qy        121 FTECGEKGEYIHFTPDLLLEKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180
              |||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db        121 FTECGEKGEYIHFTPDLLLGKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180

Qy        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240

Qy        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300

Qy        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360

Qy        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420

Qy        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480

Qy        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540

Qy        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600

Qy        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660

Qy        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720

Qy        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780

Qy        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840
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Db        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840

Qy        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDID--PTPTPTPTPDKSHNSGVNISTL 898
                ||||||||||||||||||||||||||||||||||  ||||||||||||||||||||||
Db        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPTPDKSHNSGVNISTL 900

Qy        899 VLSVIGSVVIVNFILSTTI 917
                |||||||||||||||||||
Db        901 VLSVIGSVVIVNFILSTTI 919
```

Fig 258
Seq. 258

RESULT 7
AAU29152
ID AAU29152 standard; Protein; 919 AA.
XX
AC AAU29152;
XX
DT 18-DEC-2001 (first entry)
XX
DE Human PRO polypeptide sequence #129
XX
KW PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep;
KW dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; TNF-alpha;
KW blood; chondrocyte cell; cell proliferation; cell differentiation; colon;
KW adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200168848-A2.
XX
PD 20-SEP-2001.
XX
PF 28-FEB-2001; 2001WO-US06520.
XX
PR 01-MAR-2000; 2000WO-US05601.
PR 02-MAR-2000; 2000WO-US05841.
PR 03-MAR-2000; 2000US-187202P.
PR 06-MAR-2000; 2000US-186968P.
PR 14-MAR-2000; 2000US-189320P.
PR 14-MAR-2000; 2000US-189328P.
PR 15-MAR-2000; 2000WO-US06884.
PR 21-MAR-2000; 2000US-190828P.
PR 21-MAR-2000; 2000US-191007P.
PR 21-MAR-2000; 2000US-191048P.
PR 21-MAR-2000; 2000US-191314P.
PR 28-MAR-2000; 2000US-192655P.
PR 29-MAR-2000; 2000US-193032P.
PR 29-MAR-2000; 2000US-193053P.
PR 30-MAR-2000; 2000WO-US08439.
PR 04-APR-2000; 2000US-194449P.
PR 04-APR-2000; 2000US-194647P.
PR 11-APR-2000; 2000US-195975P.
PR 11-APR-2000; 2000US-196000P.
PR 11-APR-2000; 2000US-196187P.
PR 11-APR-2000; 2000US-196690P.
PR 11-APR-2000; 2000US-196820P.
PR 18-APR-2000; 2000US-198121P.
PR 18-APR-2000; 2000US-198585P.
PR 25-APR-2000; 2000US-199397P.
PR 25-APR-2000; 2000US-199550P.
PR 25-APR-2000; 2000US-199654P.
PR 03-MAY-2000; 2000US-201516P.
PR 17-MAY-2000; 2000WO-US13705.
PR 22-MAY-2000; 2000WO-US14042.
PR 30-MAY-2000; 2000WO-US14941.
PR 02-JUN-2000; 2000WO-US15264.
PR 05-JUN-2000; 2000US-209832P.
PR 28-JUL-2000; 2000WO-US20710.

PR 22-AUG-2000; 2000US-0644848.
PR 24-AUG-2000; 2000WO-US23328.
PR 08-NOV-2000; 2000WO-US30952.
PR 01-DEC-2000; 2000WO-US32678.
PR 20-DEC-2000; 2000WO-US34956.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;
PI Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2001-602746/68.
DR N-PSDB; AAS46053.
XX
PT Novel nucleic acids encoding PRO polypeptides, used to diagnose the
PT presence of tumours, such as prostate and breast tumours, in mammals and
PT to screen for modulators of the compounds -
XX
PS Claim 11; Fig 258; 774pp; English.
XX
CC Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention.
CC The PRO polypeptides and their associated nucleic acids can be used to
CC detect the presence of a tumour in a mammal by comparing the level of
CC expression of a PRO polypeptide in a test sample of cells from the animal
CC and a control sample of normal cells, whereby a higher level of
CC expression in the test sample indicates the presence of a tumour in the
CC mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, goats
CC and rabbits but are preferably human. The polypeptides can be used to
CC stimulate tumour necrosis factor (TNF) alpha release from human blood,
CC when contacted with it. A specific polypeptide can be used to stimulate
CC the proliferation or differentiation of chondrocyte cells. The PRO
CC proteins can be used to determine the presence of tumours and also
CC susceptibility to tumour development, particularly adrenal, lung, colon,
CC breast, prostate, rectal, cervical, or liver tumours, in mammalian
CC subjects. The oligonucleotide probes specific for the PRO nucleic acids
CC can be used for genetic analysis of individuals with genetic disorders.
XX
SQ Sequence 919 AA;

Query Match 99.6%; Score 4760; DB 22; Length 919;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 916; Conservative 0; Mismatches 1; Indels 2; Gaps 1;

```
Qy          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60
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Db          1 MGLFRGFVFLLVLCLLHQSNTSFIKLNNNGFEDIVIVIDPSVPEDEKIIEQIEDMVTTAS 60

Qy         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TYLFEATEKRFFFKNVSILIPENWKENPQYKRPKHENHKHADVIVAPPTLPGRDEPYTKQ 120

Qy        121 FTECGEKGEYIHFTPDLLLEKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180
              |||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db        121 FTECGEKGEYIHFTPDLLLGKKQNEYGPPGKLFVHEWAHLRWGVFDEYNEDQPFYRAKSK 180

Qy        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        181 KIEATRCSAGISGRNRVYKCQGGSCLSRACRIDSTTKLYGKDCQFFPDKVQTEKASIMFM 240

Qy        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 QSIDSVVEFCNEKTHNQEAPSLQNIKCNFRSTWEVISNSEDFKNTIPMVTPPPPPVFSLL 300

Qy        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 KISQRIVCLVLDKSGSMGGKDRLNRMNQAAKHFLLQTVENGSWVGMVHFDSTATIVNKLI 360

Qy        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 QIKSSDERNTLMAGLPTYPLGGTSICSGIKYAFQVIGELHSQLDGSEVLLLTDGEDNTAS 420

Qy        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 SCIDEVKQSGAIVHFIALGRAADEAVIEMSKITGGSHFYVSDEAQNNGLIDAFGALTSGN 480

Qy        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 TDLSQKSLQLESKGLTLNSNAWMNDTVIIDSTVGKDTFFLITWNSLPPSISLWDPSGTIM 540

Qy        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 ENFTVDATSKMAYLSIPGTAKVGTWAYNLQAKANPETLTITVTSRAANSSVPPITVNAKM 600

Qy        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 NKDVNSFPSPMIVYAEILQGYVPVLGANVTAFIESQNGHTEVLELLDNGAGADSFKNDGV 660

Qy        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 YSRYFTAYTENGRYSLKVRAHGGANTARLKLRPPLNRAAYIPGWVVNGEIEANPPRPEID 720

Qy        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 EDTQTTLEDFSRTASGGAFVVSQVPSLPLPDQYPPSQITDLDATVHEDKIILTWTAPGDN 780

Qy        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 FDVGKVQRYIIRISASILDLRDSFDDALQVNTTDLSPKEANSKESFAFKPENISEENATH 840

Qy        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDID--PTPTPTPTPDKSHNSGVNISTL 898
              ||||||||||||||||||||||||||||||||||||  ||||||||||||||||||||||
Db        841 IFIAIKSIDKSNLTSKVSNIAQVTLFIPQANPDDIDPTPTPTPTPTPDKSHNSGVNISTL 900

Qy        899 VLSVIGSVVIVNFILSTTI 917
              ||||||||||||||||||||
Db        901 VLSVIGSVVIVNFILSTTI 919
```